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ABSTRACT

Although the results of minimum competency tests need to be interpreted with caution, data on the Texas Assessment of Basic Skills (TABS) for 1980-82 clearly indicate the inadequate results of remedial programs for minority students in Texas. Secondary analysis of the data shows that overall performance on exit level math and reading tests improved from 1980-82, and that the performance of minorities improved at a relatively faster rate than that of nonminorities. The performance gap among ethnic groups, however, remained significant. Thus, while 87 percent of White 9th graders demonstrated mastery of the exit level math test, only 53 percent of Blacks and 68 percent of Hispanics did so. The percentages for reading were 85 percent, 49 percent, and 56 percent respectively. Examination of data on the percentage of 9th graders achieving mastery of all three TABS subtests, failing to master at least one subtest, and failing to master all three subtests reflects a similar pattern. Tenth and eleventh grade data also reflect the performance gap pattern, as do data on mastery of math, reading, and writing objectives. (CMG)

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TABS: WHAT SECONDARY ANALYSIS REVEALS ABOUT MINORITY ACHIEVEMENT

by Maria del Refugio Robledo and Albert Cortez

The 1982-1983 school year marked the fourth annual statewide assessment of basic skills in Texas. The Texas Education Agency (TEA) will soon release the fourth in a series of annual reports summarizing the performance of students enrolled in grades 3, 5, and 9 who took the State-mandated Texas Assessment of Basic Skills (TABS). The purpose of this article is to examine emerging trends as reflected in the three-year data base which is presently available. Specifically, the performance of ninth grade students will be examined over the 1980 through 1982 testing periods, focusing on the relative performance of Black, Hispanic, and White students. When the fourth annual statewide summary report is released, 1983 results can also be examined in this context.

In October of 1982, TEA released the third annual TABS report entitled *Texas Assessment of Basic Skills, Statewide and Regional Results, 1982.* The report notes that overall student performance on the reading and mathematics subtests of the TABS increased when compared to performance levels in previous years. Secondary analysis of the data confirms this observation; most objectives in the TABS tests reflect a 2-5 point increase in the percentage of students mastering each objective. Although such findings are of general interest, the collapsing of data across ethnic groups obscures information concerning the relative performance of major student subgroupings.

Based on data collected during the 1980 through 1982 testing periods, the above-mentioned report suggests, "that the overall performance of all three groups improved each year, with the performance of Black and Hispanic students improving at a higher rate than that of White students." (p. 54) Figure 1, extracted from the same report, graphically depicts the percentages of students mastering the exit level mathematics and reading tests for each ethnic group over the three-year period. Overall performance has improved and the performance of minorities has improved at a relatively faster rate than that of non-minorities. Further examination of the same data reveals, however, that the performance gap among ethnic groups has remained significant. The performance of Black and Hispanic students fell far short of meeting target goals. As of 1982, only 53% of Black students and 68% of Hispanic students in the ninth grade mastered the exit level mathematics test. In contrast, 87% of White students at the ninth grade demonstrated mastery of the same test. In the reading exit level test, 85% of White students at the ninth grade demonstrated mastery, while only 49% of Black students and 56% of Hispanic students achieved mastery (see Figure 1).

In addition to compiling data on the relative performance of various student subgroups on the reading and mathematics section of the test, TEA also has compiled annual data on the percentages of students which: (1) achieved mastery of all three TABS subtests, (2) failed to master at least one subtest, and (3) failed to master all three subtests. Figure 2 summarizes the relative performance of Black, Hispanic, and White students in these areas with regard to mastery of all three subtests (reading, math, and writing) which comprise the TABS battery. While the overall proportion of students mastering all three tests has increased across all ethnic groups, the data reflect that both Blacks and Hispanics lag dramatically behind the overall performance of White students on mastery of the total TABS battery. An examination of the data reveals that while 59% of White students were demonstrating mastery on the three TABS subtests in 1980, only 20% of Blacks and 29% of Hispanics were performing at comparable levels. By 1982, 76% of White students were reflecting mastery on all three TABS tests, while only 33% of Blacks and 44% of Hispanics were keeping pace -- a trend that reflects a continuation of the performance gap between the various groups.

A critical look at data focusing on the number of students who failed at least *one* part of the TABS battery reflects a similar pattern. In 1980, 80% of Black ninth graders and 71% of Hispanic high school freshmen had failed at least one TABS subtest, as compared to 41% of White students.

In 1982, 67% of Black ninth graders (down from 80% in 1980) and 56% of ninth grade Hispanic pupils (down from 71% in 1980) failed at least one TABS subtest; by comparison 25% (down from 41%) of White students performed at similar levels. Calculation of the difference between the 1980 versus 1982 performance levels reflect that Blacks had improved by 13%, Hispanics by 15%, and White pupils by 16%, which in essense slightly increases the gap between the various groups.

Data on the proportions of minority students *failing to achieve mastery on all three TABS subparts* raises even more serious concerns. In 1980, 37% of Black students, 26% of Hispanics, and 7% of White ninth graders failed all three TABS subsections. In 1982, 24% of Black ninth graders, 16% of ninth grade Hispanics, as compared to only 4% of White students, failed all three TABS subtests.

Although data on the number of tenth grade students afforded the opportunity to retake sections of the TABS test in which they had failed to demonstrate mastery in the previous years is limited, preliminary evidence suggests that efforts to improve student performance on the TABS are more effective for non-minority than for minority pupils. Figure 3 reflects that, of all Black tenth graders

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Select Committee
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3. The Revenue Package and Its Effects	● Determine the adequacy of current methods of funding and, if necessary, propose and develop alternative methods for future funding to guarantee equal educational spending and opportunities. ● Study and propose new and/or alternative revenue sources, tax reform, and relief as necessary to provide a quality education program. ● Ensure that any new tax increase or funding adjustment proposed by the Committee shall be made only after careful analysis regarding the effect of such changes on local property taxes.
4. Special Programs and Problems	● Bring our educational system in line with the "high technology" demands of the future including the emphasis on basic skills, analysis of future job market trends, and the relationship of public schools with vocational programs. ● Study thoroughly and make recommendations on the issues of discipline and classroom management from both a classroom setting and the teacher training standpoint. ● Assess the causes of school dropouts and propose alternatives to divert this trend. ● Address the needs of special populations such as the children of illegal and legal aliens and migrant workers. ● Examine the role and scope of our regional education service centers and propose recommendations to strengthen their interplay with the state and local districts. ● Conduct a study to assess the wide-ranging effects of a number of recent and pending court cases affecting our public school system in Texas as we move into the next century.

The Governor's communiqué stressed that efforts of the committee "shall encompass but not necessarily be limited to all of the areas itemized in the charge." The committee was given no definitive timetable for completion of its task, but all indications suggest that it will not submit its reports before November of this year. Proposed meeting dates for the committee include September 14, September 21, September 28, October 12, and October 16. In addition to its Austin meetings, the committee has undertaken numerous site visits to urban, suburban, and rural school districts to acquire varied perspectives on selected issues.

Although the committee has not yet issued a report, various facets of the educational community are expressing concern over the committee's foci. Teachers are concerned at the group's concern with teacher competency and merit pay issues. Bilingual education advocates have taken issue with the group's negative comments concerning the program, and equity proponents bemoan the fact that the wide spending disparities have not been extensively nor aggressively addressed by the committee.

In his letter to the committee, Governor White proposed to the committee that, "Now we take our place in that line of individuals who have spoken out for quality, for equity, and for recognition of the importance of those who teach our most valuable resource, our children. This select committee stands as our hope for the future." It remains to be seen whether the committee will rise to the occasion.

The Board of Directors of IDRA allocated $50,000 at the July Board Meeting for the establishment and support of a Department of Computer Instruction. This grant marks the first time that an extensive IDRA project has been funded with IDRA funds earned from the marketing of instructional materials.

The new department will focus on the use of computers in schools for the development of computer literacy, the use of computer-assisted instruction, and the use of computers for the management of instruction. Of particular interest is the impact that computer technology may have on exacerbating or diminishing the opportunity gap between mainstream students and minority populations.

The Department of Computer Instruction is conducting a context evaluation on the distribution and use of computers in Texas schools. The research effort will focus on the impact of computer usage on minority, disadvantaged, and limited English proficient students. The department will be responsible for the development of staff awareness and competency in the use of computer technology in the schools, as well as developing skills in the use of computer authoring systems available for computer curriculum development.

The Department of Computer Instruction also will identify and acquire the necessary additional resources for further activities including the development of computer curriculum for teaching English as a second language, and bilingual language development programs.

FIGURE 1, NINTH GRADE TABS STATEWIDE RESULTS IN READING AND MATH BY ETHNIC GROUP, 1979-80/1980-81/1981-82

	BLACK			HISPANIC			WHITE		
	79-80	80-81	81-82	79-80	80-81	81-82	79-80	80-81	81-82
Percent Mastering Reading	44	45	49	52	52	56	83	84	85
Percent Mastering Math	42	45	53	58	60	68	82	84	87

FIGURE 2, NINTH GRADE - TABS STATEWIDE RESULTS, 1979-80/1980-81/1981-82

	BLACK			HISPANIC			WHITE		
	79-80	80-81	81-82	79-80	80-81	81-82	79-80	80-81	81-82
Total # Tested	(31,809)	(30,080)	(29,936)	(53,739)	(53,839)	(54,311)	(133,083)	(123,897)	(122,004)
Percent Mastering All Three Tests	20	30	33	29	39	44	59	72	76
Percent Failing to Master at Least One Test	80	70	67	71	61	56	41	28	25
Percent Failing to Master all Three Tests	37	23	24	26	16	16	7	4	4

FIGURE 3, TENTH GRADE STUDENTS RETAKING TABS, 1980-81/1981-82

	BLACK		HISPANIC		WHITE	
	80-81	81-82	80-81	81-82	80-81	81-82
Math	30	38	46	56	55	69
Reading	28	36	39	44	53	67

FIGURE 4, ELEVENTH GRADE STUDENTS RETAKING TABS, 1980-81/1981-82

	BLACK		HISPANIC		WHITE	
	80-81	81-82	80-81	81-82	80-81	81-82
Math		36		57		72
Reading		38		49		72

FIGURE 5

PERCENTAGE OF NINTH GRADE STUDENTS BY ETHNIC GROUP MASTERING MATH OBJECTIVES, 1980 - 1982

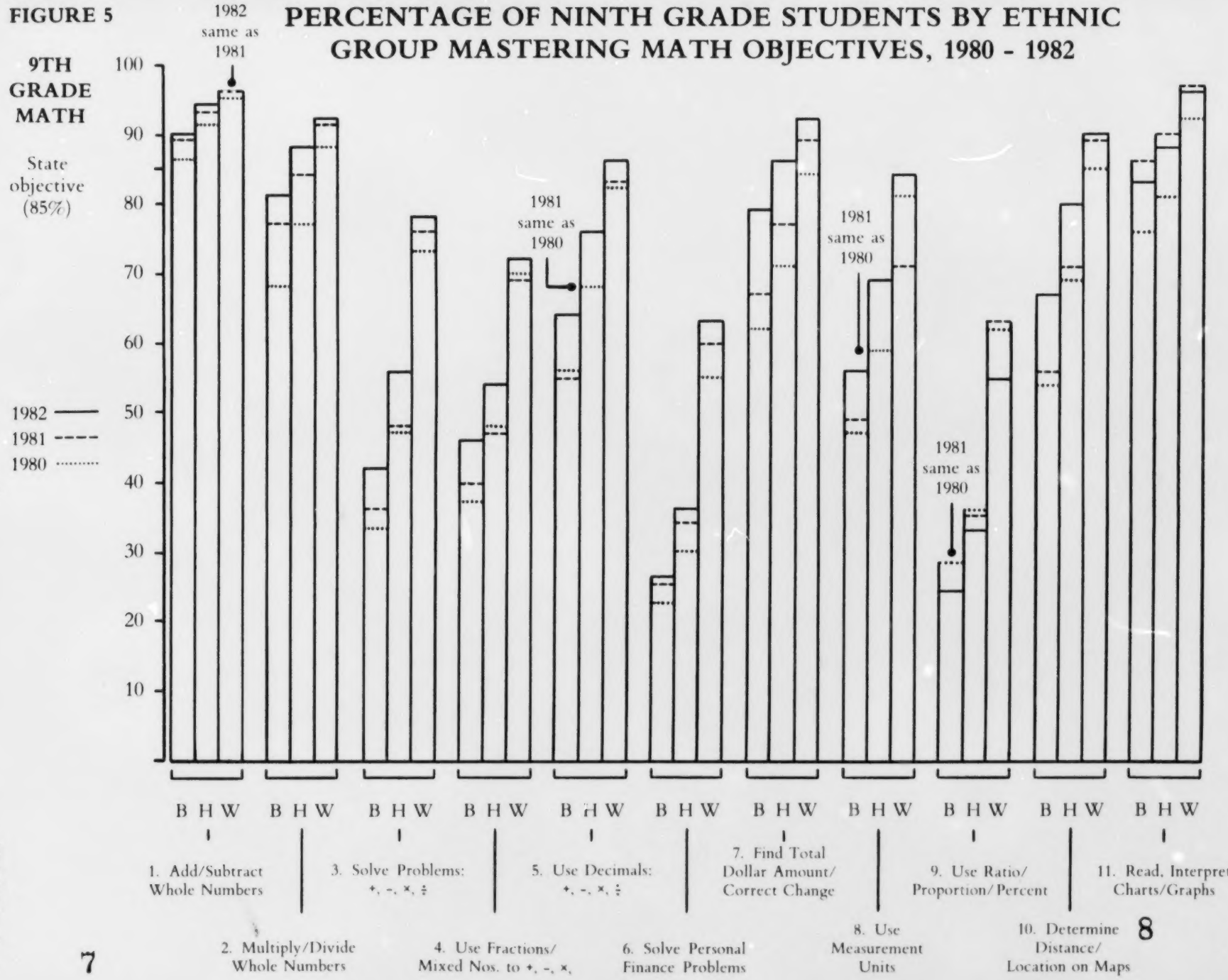
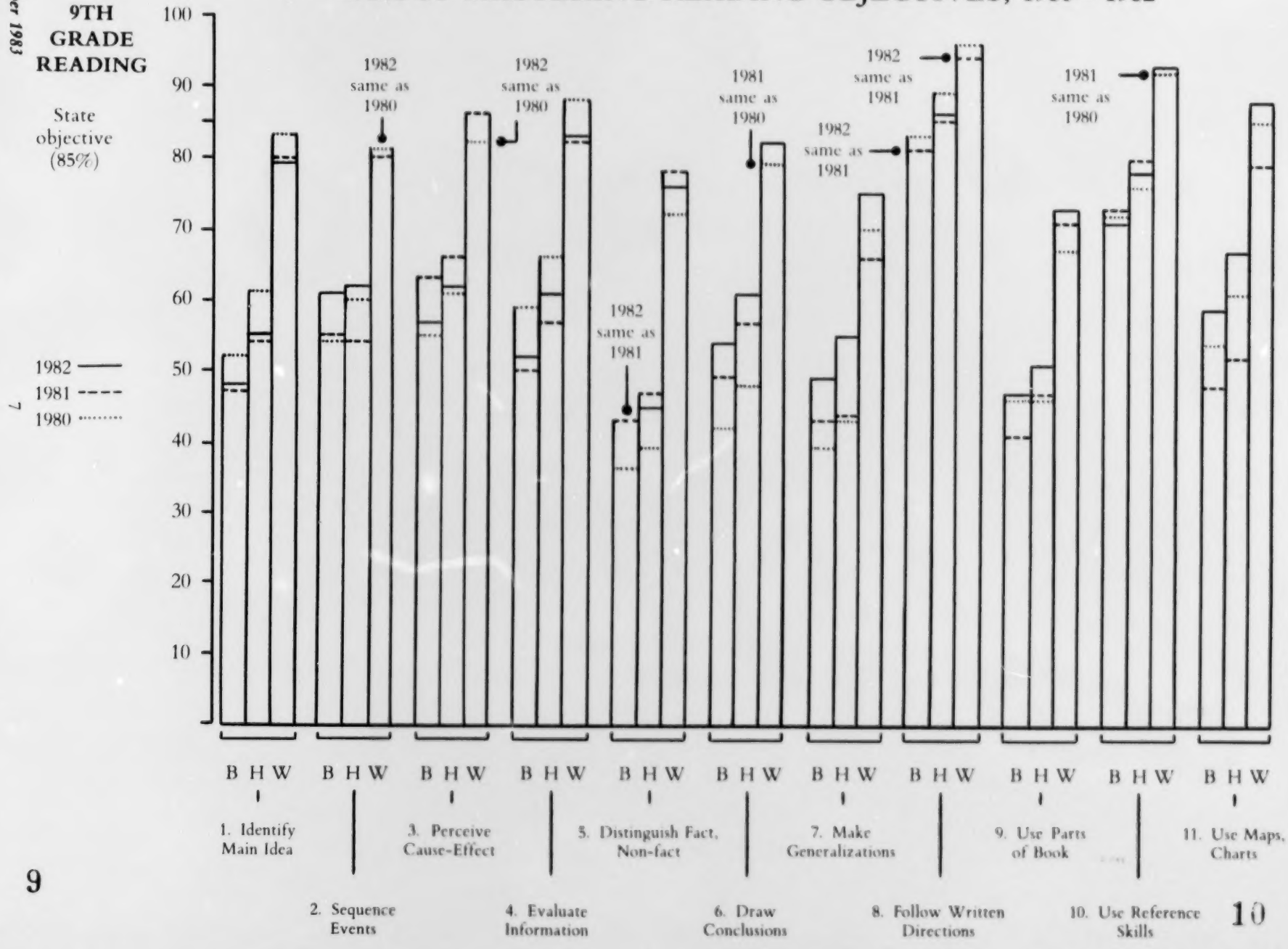


FIGURE 6

PERCENTAGE OF NINTH GRADE STUDENTS BY ETHNIC GROUP MASTERING READING OBJECTIVES, 1980 - 1982



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retested on the TABS reading exit level test, only 30% in 1981, and 38% in 1982 achieved mastery levels. Among Hispanic tenth graders, 46% achieved mastery in 1980 and 56% achieved mastery in 1981. For White tenth grade pupils retaking the TABS exit level math tests, 55% achieved mastery in 1981, and 69% met the mastery criteria in 1982. The findings are comparable for tenth grade students retaking the TABS reading test.

On the basis of these tenth grade results, one can conclude that significant numbers of minority students (who are already overrepresented in the number retaking the test) are failing the test on the second administration. Moreover, eleventh grade data continues to reflect the same percentages of failure (see Figure 4). Based on these early returns one could assume that close to 20% of Blacks and 15% of Hispanics, as compared to less than 2% of White pupils, may not achieve exit level competencies on the TABS exit level exams before they finish high school.

Figures 5 and 6 graphically present the percentages of ninth grade students, by ethnic group, who mastered individual objectives on the mathematics and reading tests, respectively. Data are presented for each testing period. The patterns which emerge are consistent with analyses of overall test mastery. White student mastery percentages are much higher than either Hispanic or Black mastery percentages for every objective in all testing periods. Hispanic mastery percentages are somewhat higher than Black mastery percentages.

The State Board of Education has identified the following target goals for the improvement of student achievement. By 1983, 85% of students completing high school will demonstrate mastery of exit level mathematics and reading objectives. By 1985, 85% of students completing high school will demonstrate mastery of exit level writing objectives. Utilizing the 85% criterion, patterns of performance between and among ethnic groups can be examined in terms of individual objectives.

In mathematics (Figure 5), 85% or more of Black students mastered one of eleven objectives in 1980, two objectives in 1981, and one objective in 1982. One mathematics objective was mastered by 85% or more of Hispanic students in 1980; two, in 1981; and four in 1982. In 1980, White students met the percentage mastery criterion on four mathematics objectives; in 1981, five; and in 1982, on six objectives.

On the reading test (Figure 6), no single objective was mastered by 85% or more of Black students in 1980, in 1981, or in 1982. In 1980, 85% or more of Hispanic students in the ninth grade demonstrated mastery of only one of the eleven reading objectives; only one objective was mastered by 85% or more of Hispanic students in the two subsequent testing periods. In 1980, White students met the percentage mastery criterion on four of the eleven reading objectives. In 1981 and 1982, three reading objectives were mastered by 85% or more of the White students.

The differences in the number of objectives which have been mastered by 85% or more of the various student groups are additional indicators of the significant lag in minority student achievement. It is important to note that, in most cases, the objectives that have been mastered by either Blacks or Hispanics are those that are at the lower end of the basic skills continuum or those that, as a function of the measurement criteria, have high mastery levels. In mathematics, for example, objective 1 (add and subtract whole numbers) is the only objective that has been mastered by 85% or more of Blacks in all three testing periods. Even in the context of a very basic skills continuum, this objective is at the lower end of skills development. Eighty-six percent of Black students, 91% of Hispanic students, and 95% of White students mastered the objective in the first testing period. In reading, only objective 8 has been mastered by 85% or more of Hispanic students, regardless of testing period. Objective 8 (following written directions) is at the lower end of the continuum and was mastered by 96% of White students in the initial TABS testing period.

FIGURE 7, NUMBER OF TABS MATHEMATICS AND READING OBJECTIVES MASTERED BY SPECIFIC PERCENTAGES OF THREE ETHNIC GROUPS, 1980-1982

	MATHEMATICS						READING					
TESTING PERIOD	B		H		W		B		H		W	
	85% +	70%-84%	85% +	70%-84%	85% +	70%-84%	85% +	70%-84%	85% +	70%-84%	85% +	70%-84%
1980	1	1	1	3	4	5	0	2	1	1	4	6
1981	2	1	2	3	5	3	0	2	1	1	3	7
1982	1	3	4	2	6	3	0	2	1	1	3	8

In order to assess progress toward meeting the State Board of Education's 85% criterion, we can also examine the degree to which each ethnic group is approximating the criterion. Figure 7 presents the number of objectives on which the criterion has been met by each ethnic group and the number of objectives which are within 15 percentage points of the criterion. It becomes evident that not only are ethnic groups meeting the percentage mastery criterion on few and lower level objectives, but the two ethnic groups are also further behind in approximating the 85% criterion. In 1980, for example, no single reading objective had been mastered by 85% or more of the Black students tested; two objectives were within 15 percentage points (70% - 84%). In 1982, performance remained the same; no objectives were mastered by 85% or more, and two objectives were within 15 points. In fact, in 1980 and again in 1982, the same objectives (no. 8 -- follow written directions, and no. 10 -- use reference skills) were within 15 points of the criterion (see Figure 7). In 1980, in 1981, and again in 1982, Hispanic students have reached the 85% criterion on only one objective (no.10 -- use reference skills). White students tested in 1980 met the 85% mastery criterion on four reading objectives; they were within 15 points of the criterion on another six

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TABS

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objectives. In 1982, 85% or more of White students had mastered three objectives; an additional eight objectives were within 15 points of the criterion. By 1982, then, at least 70% of White students tested has mastered all eleven reading objectives. In contrast, only two objectives had been mastered by at least 70% of Black or Hispanic students in 1982. This latter finding is identical for 1980 and 1981. Similar overall trends and performance gaps are evident for the mathematics objectives, with slightly less severe gaps.

Conclusion

Although IDRA concurs with the critics of minimum competency testing that the results of such exams should be interpreted cautiously, available data clearly indicates the presence of a critical problem which needs immediate and comprehensive attention.

The state compensatory education program was created to address the issue of student underachievement. Apparently, the remedial efforts being provided with these monies are less than adequate. Whether additional revenues are required to effectively address the issue or a thorough revamping of current remedial programs is necessary has yet to be established.